

Remarks

A. Introduction

Examiner Thomas is thanked for the courteously conducted interview on August 3, 2004. As a consequence of that interview, prosecution of the claims which were previously on remand by the Board of Patent Appeals and Interferences was re-opened. A non-final office action was promptly mailed on August 11, 2004 citing new grounds of rejection under 35 USC §101. A reiteration of the prior art rejection stemming from the final office action of August 30, 1996 was also provided.

Claims 1-8 remain outstanding and rejected, Applicant believes that in view of the above amendments and the following remarks, reconsideration on the merits, and allowance of the claims in their present form, is now warranted.

B. Rejection Under Section 101

With regard to the instant rejection under Section 101, applicant believes that the claims, as presently amended, clearly fulfill the requirements under Section 101.

The PTO standard for business method inventions is set forth in MPEP Section 2106 *et seq.* (which was adopted on or about February 2003), which is in turn derived from the CAFC decision which derived its standard from the State Street decision.

In State Street, the Federal Circuit reversed a District Court's holding of invalidity because the claimed subject matter fell into the "mathematical algorithm" exception to § 101. The claims at issue in that case were six "machine" claims incorporating means-plus-function clauses. The sole independent claim recited a data processing system for managing a financial services configuration of a portfolio having computer processor means, storage means, a first means for initializing the storage

medium, and second through fifth means which process various data and allocate the data to each of the funds in the portfolio. Essentially, the claims are directed to the transformation of data, through a series of mathematical calculations, into output data, i.e., a final share price.

In reversing, the Federal Circuit stated that as a practical matter, in order for an algorithm to be patentable, it must be applied in a useful way. The Federal Circuit then held "that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result.'" State Street, 1998 WL 409704 at p. 4 (quoting In re Alappat, 33 F.3d 1526, 1544 (Fed. Cir. 1994)).

By holding as it has in State Street, the Federal Circuit has made abundantly clear that a physical transformation of data is unnecessary for finding an algorithm patentable. What is necessary in order to find patentable a claim including an algorithm is that the algorithm be applied in a useful way. (emphasis added)

More recently the Board of Patent Appeals ("BPAI") decided Ex parte Bowman at 61 USPQ.2d 1669. Relying on *dicta* from the CCPA decision In re Toma 197 USPQ 852 (CCPA 1978), the BPAI concluded that the invention must be within the technological arts in order meet the requirements of §101.

Without debating the merits of the Bowman rationale, it is amply evident that the present invention is closely tied to a technological disclosure, and thereby fulfills the requirements of Bowman.

The claims at issue here relate to a system and method for evaluating the health insurance liabilities of individuals based on their respective life styles. More specifically, this

invention relates to a computer system for evaluating the cost to an employer or an insurance administrator for insurance coverage for individuals, where this cost will be a function of inputs reflecting lifestyle choices of the individual. The claimed computer system performs a detailed analysis of an individual's lifestyle factors by assessing the risks associated with such factors. The computer system then assigns a monetary insurance value to that individual based on a complete assessment of the lifestyle factors. Clearly, such limitation have tremendous utility both to the insurer and to the insured. Moreover, the above features are shown implemented as part of a computer system. As a consequence, they are completely within the technological arts.

In summary, the claims as amended meet the current requirements for business methods as annunciated in State Street, and are within the technological arts as set forth in Ex parte Bowman.

C. Rejection Under 35 USC §103

Claims 1-8 also stand rejected as being non-obvious over DeTore et al.

The present invention discloses a system which provides for a detailed analysis of an individual's lifestyle and accompanying risks in order to make a monetary insurance value assessment. A valuable result of the above described system is that the invention provides a completely automated health insurance evaluation system wherein a potential insured can interactively respond to a computer generated query.

The questions in the survey cover a wide array of lifestyle choices including: a user's environment, health and nutrition (Specification pg. 15), radiation exposure (pg. 15), diet (pg. 15), whether they smoke, or indirect exposure to smoke (pg. 15), diseases and allergies (page 15), home exposures, or work related risks (pgs. 15-16), exercise recommendations (pg. 16), family medical history (pg. 16), a respondent's weight (pg. 16),

height (pg. 16), stress (pg. 17), drug use (pg. 17), safety (pg. 17), present and past nutrition (pg. 17), pets (pg. 17), alcohol use (pg. 17), whether the person is dieting (pg. 21), geographic considerations (pg.22), hormonal patterns (pg. 22), among many other factors.

To assure the veracity of the answers, a separate set of medical questions is sent to the respondent's doctor or lab technologist.

The computer system also attaches a positive or negative value to each response. Depending on the total points assigned a person, he or she would be placed in one of four health insurance plans. In addition, the computer system correlates past values to present insurance premiums subsequent to the initial survey such as to reward an improvement in an individual's health. The system provides respondents with an incentive to modify their lifestyles. The system further recommends methods for such modification. For example, messages include information pertaining to correct vitamin doses, intake level of certain foods, suggestions on life style modifications, and recommendations for exercise.

Unlike the claims of the present invention which are described in more detail below, DeTore analyzes only risk, and only renders an evaluation based on the level such risk poses to an individual. Moreover, DeTore fails to provide useful and practical suggestions to improve one's health. Specific failures of DeTore are set forth below.

First, DeTore does not make an analysis based on an individual's lifestyle as defined in the specification and enumerated above. Moreover, DeTore does not teach or suggest analyzing both present and future effects of those lifestyle choices as provided in the claims of the present invention. (For example, claim 1, lines 3-4, recites "survey means for gathering information pertaining to said individuals' lifestyle, health, and medical tests."; see also claim 6; and claim 7, lines 1-4). Rather, DeTore makes an assessment on

existing dangerous leisure activities and to calculate the attendant risks. Specifically, the aspects of an individual's lifestyle which are assessed in DeTore are alcohol use, illicit drug use, and relevant driving history. (Specification, column 12, lines 58-61).

By automatically assessing a variety of health-related categories, the present invention is able to evaluate all characteristics of an individual, thus providing a full and more precise assessment of risks. By contrast, DeTore only assesses existing medical problems and other red flags such as tobacco or illicit drug use to evaluate risks. The present invention goes farther than that. The present invention recognizes that a person's lifestyle rather than existing risks or medical problems has a significant impact on their health and risk for future disease. As such, the present invention, unlike DeTore, treats such choices as an integral part of the risk analysis. By evaluating the individual as a whole, taking into account past and present conditions and possible effects in the future, the present invention makes a proper risk assessment. (see, claim 2, lines 3-4, reciting means for assigning "negative values for actions that increase insurance risks and positive values for actions that decrease insurance risk. ").

Second, when DeTore inquires into these activities, however, it does so solely to determine whether or not coverage should be declined. *Id.*, at lines 61-62. By contrast the present invention, as claimed, provides a weight which is assigned to particular activities, whether or not those activities are risky. Thus, the present invention as claimed assesses a wide array of lifestyle choices, and assigns a value to each. Those weights are then used to evaluate the cost of a user's lifestyle answers, not solely to decline coverage.

Armed with a precise assessment of an individual's health, the present invention through its messaging means (claim 1, lines 19-20) provides the respondent with recommendations for treatment of health problems and for altering lifestyle to ensure better health in the future. Because these recommendations are discrete pieces of

information in response to the wide variety of questions asked, they are specific and individualized to the needs of the person.

Third, DeTore merely provides the individual with general literature on a medical problem. For example, as the Examiner noted, DeTore provides suggestions on how to improve one's health in the "TREATMENT" section of the information supplied to an individual suffering from hypertension (DeTore cols. 19-22). This information, however, is merely a string of general statements on the treatment of hypertension. Thus, while DeTore describes different methods for combating hypertension, it fails to make specific recommendations in light of the needs of a particular individual.

By contrast, the present invention provides specific, and thus useful individualized recommendations. For example, DeTore broadly recommends "eliminat[ing] if possible" the risk factor of "elevated cholesterol," whereas the present invention provides a guide for accomplishing this by suggesting the reduction of intake of specific foods. (see, claim 1, lines 19-20, "messaging means for providing messages to at least such individual that contain said pre-defined suggestions."). Such a message may include the following: "CHOLESTEROL is increased by: 1.) Red meat; 2.) Dairy products; 3.) Nuts; 4.) Shellfish." (specification, pp. 15-16).

Fourth, DeTore only provides an individual with general recommendations for the treatment of medical problems. It fails to make suggestions regarding other factors that contribute to poor health, such as certain lifestyle choices. By failing to provide useful advice on a great number of day-to-day activities, DeTore neglects to access many other causes of health problems. Hence, it cannot serve as a mechanism to which an individual can turn when seeking out useful information for modifying lifestyle to attain better health.

The present invention on the other hand focuses on lifestyle recommendations that affect the individual more broadly. (see, claim 7, lines 17-20, "choosing pre-defined suggestions for improving health and decreasing risk based upon said insurance comparison; providing messages to such individual that contain said pre-defined suggestions;"). For example, for individuals who spend a lot of time at the beach, the present system will provide a message that provides cautionary information on radiation exposure (e.g., specification, p. 15, lines 20-22).

Fifth, contrary to the office action's contention, a complete survey of an individual's health is not an obvious application of DeTore because it is not in the ordinary practice of risk assessors to inquire into a wide variety of lifestyle choices, let alone to provide recommendations to individuals as to how to reduce insurability risk. As is common in the field of risk assessment, DeTore only focuses on evaluating existing medical problems. It cannot take into consideration lifestyle data as recited in claims 1-8 of the present invention. Likewise, DeTore fails to provide a basis for determining the effect of lifestyle choices on health insurance coverage as claimed by the present invention. (claim 1) Finally, DeTore fails to analyze and then provide a user with suggestions for improving his or her health condition as in all the claims of the present invention.

In conclusion, the present invention is novel and non-obvious because, in calculating insurance risk, it surveys a wealth of information pertaining to an individual's health. Not only does the present invention evaluate the insurance risk, but it also evaluates overall lifestyle factors and the provides particularized suggestions for improving health and lifestyle. These functions cannot be accomplished by simple mechanisms which evaluate insurability risk, such as DeTore as well as the other cited prior art references.

Accordingly, claims 1-8 are non-obvious over DeTore et al.

In view of the foregoing amendment and applicant's enclosed remarks, applicants respectfully submit that the claims, as amended, are allowable over the art of record.

Dated: October 19, 2004

Respectfully submitted,

By 

Jon D. Grossman

Registration No.: 32,699

DICKSTEIN SHAPIRO MORIN &
OSHINSKY LLP

2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700

Attorney for Applicant